ON Semiconductor®

Final Product/Process Change Notification

Document # : FPCN22134XF
Issue Date: 6 February 2019

Title of Change:	Hydrazine elimination of ON Semiconductor Niigata Co., Ltd. (OSNC).
Proposed first ship date:	13 May 2019
Contact information:	Contact your local ON Semiconductor Sales Office or <Hiroshi.Kojima@onsemi.com>, <Hidekazu.Inoue@onsemi.com>
Samples:	Contact your local ON Semiconductor Sales Office or <PCN.samples@onsemi.com> Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change.
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <Satoru.Fujinuma@onsemi.com>
Type of notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <PCN.Support@onsemi.com>
Change Part Identification:	Date code.
Change Category:	☑ Wafer Fab Change ☐ Assembly Change ☐ Test Change ☐ Other _____

Change Sub-Category(s):

☐ Manufacturing Site Addition
☐ Manufacturing Site Transfer
☑ Manufacturing Process Change
☐ Material Change
☐ Product specific change
☐ Datasheet/Product Doc change
☐ Shipping/Packaging/Marking
☐ Other: _____

Sites Affected:	ON Semiconductor Sites: ON Niigata, Japan	External Foundry/Subcon Sites: None

Description and Purpose:

This Final notification announces the elimination of Hydrazine in ON Semiconductor Niigata Co., Ltd., Japan for parts listed in this PCN.

Hydrazine was identified as a prohibited chemical in ON Semiconductor as it is considered as a carcinogenic substance and has high risk of fire and explosion.

The related products are transferred to a process that does not use Hydrazine in the same site ON Semiconductor Niigata (OSNC).

Change Point	Before Change Description	After Change Description
Fab (OSNC)	N1 Fab (Minimum rule=0.8um, Class=10)	N1 Fab (Minimum rule=0.8um, Class=10) AND N2 Fab (Minimum rule=0.25um, Class=1)
Wire material	Aluminum (without Anti-reflected Layer)	Aluminium (with Anti-reflected Layer)
Interlayer material	Silicon nitride and Polyimide or Polyimide	Silicon nitride and Silicon oxide or Oxide

Reliability Data Summary:

QV DEVICE NAME: **LA4440J-K-E**
PACKAGE: **SIP14H**

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Tj=150°C, Maximum supply voltage	1008 hrs	0/77
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/77
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/77
HAST	JESD22-A101	130°C, 85% RH, 18.8psig, Recommended supply voltage	96 hrs	0/77
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig,	96 hrs	0/77
HBM	JS001	100pF,1.5kohm,+/-2KV	-	0/3
CDM	JS002	+/-500V	-	0/3

Note: Judgment Criteria are due to the limits of the electrical characteristics in the detail specification.

Electrical Characteristic Summary:

There is no change in the electrical performance. Datasheet specifications remain unchanged.

List of Affected Parts:

Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the **PCN Customized Portal**.

Part Number	Qualification Vehicle
L78LR05DL-MA-E	LA4440J-K-E
L78LR05DL-TL-E	
L78LR05D-MA-E	
L78LR05D-TL-E	
L78LR05EL-TL-E	
L78LR05EL-TR-E	
L78LR05E-MA-E	